

as the stage of the disease is difficult to determine. Children are poor subjects for acute septic infection of the peritoneum, the appendix is often in a high position, and adhesions are not readily formed. The safest course in children is not to be too confident of one's power to estimate the exact condition of the appendix, but to make a definite diagnosis of the disease at the earliest stage of its course, so that prompt surgical treatment may avert a fatal conclusion.

Saline Solutions in Epidemic Diarrhea.—J. ROSS MACKENZIE (*British Jour. Child. Dis.*, 1912, ix, 343) investigated the efficacy of injections of normal saline solution and sea water plasma in epidemic diarrhea. In 85 per cent. of the cases the routine treatment was efficacious. This treatment consisted, briefly, of gastric lavage, starvation for twenty-four hours, elimination by castor oil, bowel irrigation with normal saline solution, and castor oil, 4 minims every four hours as an astringent. In the 15 per cent. of cases resisting this treatment, the morbid conditions were: persistent vomiting and diarrhea, profound toxemia and collapse, and anuria. The daily urinary output is an index to the severity of the toxemia. Anuria is the key to the moribund condition in epidemic diarrhea, and is caused by lowering of the general blood pressure, and that of the kidneys in particular. Mackenzie is convinced that the subcutaneous injection of sea-water plasma, normal saline solution, or sterile water shows an immediate response, not from any particular or isolated constituent of the fluid, but from an increased blood pressure. This promotes an increased secretion of urine, and the passage of a large quantity of accumulated toxins. Normal saline solution and especially hypertonic saline solution acts more permanently, but not more rapidly than sterile water. This greater permanency is probably due to the saline constituents. The comparative value of normal saline solution and sea-water plasma in this condition cannot be estimated fully. Of Mackenzie's cases resisting ordinary treatment, 12 per cent. responded to injections of sterile water or saline solutions. The immediate effects of both these fluids were increased blood pressure and disappearance of diarrhea, collapse and anuria. Normal saline solution is as efficacious, if not as permanent in effect as salt-water plasma, and has the advantage of being cheap and easily available everywhere. The earliest indications of collapse call for subcutaneous injections of saline solution.

Are the Inclusion Bodies in Leukocytes Pathognomonic of Scarlet Fever.—H. BONGARTZ (*Berlin. klin. Woch.*, 1912, xlix, 2124) reports his observations in a study of 80 cases, relative to the inclusion bodies in the leukocytes first reported by Dölle as occurring in scarlet fever, and corroborated by Kretschmer of Strassburg and by Nicoll and Williams of New York. The inclusion bodies are small corpuscular elements within the protoplasm of the leukocytes and distinguished from the nucleus by being less intensely stained. The three forms usually seen are in shape similar to a coccus, a bacillus, and a crescent. From 1 to 6 bodies are usually found in one leukocyte. The other three observers tended to the belief that these bodies were usually found only in scarlet fever. Bongartz's observations aimed to deter-

mine whether these bodies occurred only in cases of scarlet fever, and whether they were pathognomonic of the disease. His examinations were always checked over and corroborated by two of his assistants. He examined 80 children ranging in age from five days to thirteen years. Of this number 59 were ill and 21 were in good health. In the 21 healthy children the inclusion bodies were present in 17 cases and absent in 4 cases. The bodies were found positive in 11 cases of scarlet fever, 6 cases of diphtheria, 4 cases of acute bronchitis, 3 cases of pertussis, 4 cases of tuberculosis of the bones, 4 cases of gastrointestinal catarrh, 1 case of typhoid and 3 cases of catarrhal pneumonia. In some of the preparations, especially those of pertussis and tuberculosis the bodies were found in only a few of the leukocytes, but this was the only difference noted. Bongartz therefore concludes that the inclusion bodies are found in the protoplasm of the leukocytes in children generally. That they apparently increase in number and are found in almost all the leukocytes during febrile conditions. That it is not possible to consider the inclusion bodies pathognomonic for any one disease, certainly not for scarlet fever.

Some Considerations on Infant Feeding.—F. G. CROOKSHANK (*British Jour. Child. Dis.*, 1912, ix, 31) mentions a large number of considerations affecting infant feeding, based on clinical experience. The method of inductive logic, the hypotheses based on clinical experience is preferable to the deductive plan, and the diversity of opinions in pediatrics is unfortunate. The problem of infant feeding depends on the mother's state of nutrition during pregnancy and the amount of stimulation of the maternal glands by particular substances in the diet during and preceding pregnancy. Defective suckling power is often due to a lack of "biological galactagogues." The milk of a cow fed on lush pasturage and sweet hay has more biological value than that from a cow fed on artificial fodder such as copra, etc. The peasant woman is usually chosen as a wet nurse in preference to the town-bred product, because she is efficient biologically, having lived on food which has produced her race. This suggests the importance of the biological qualities of the food of cows and other animals that supply human aliment. Practical experience shows that if the child be healthy and the cow well fed and kempt, far less modification of the milk is necessary. Wonderfully successful results have attended Dr. Langmead's plan of giving undiluted, unboiled milk with the addition of a few grains of sodium citrate. There is probably a definite correlation between artificial feeding in infancy and the functioning of the lactiferous gland in later life. Slightly diluted, unboiled cow's milk with the addition of some malted food has been of most service to Crookshank. Fresh milk can be increased in quantity from time to time until the child is taking almost undiluted fresh cow's milk. Malt helps in massing the curd, is slightly laxative, and compensates for deficiency in cream. A little Bermuda arrow-root, well boiled, and taken nearly cold is an excellent, temporary food in intestinal disorders. Veal or mutton broth thickened with arrow-root is a good substitute for milk during the hottest weeks of summer. It is better than boiled milk, if, in making the broth, the sternum and ribs of veal and mutton are first split open. A yearling, well forward with its teeth should